Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 61020-A/JPW/PJP	Serial No. 09/505,458
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Applicant Michael R. Rosen et al.	
	Filing Date February 11, 2000	Group

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
JPO		3 9 3 7 2 2 6	02/10/76	Funke			
		4 0 8 8 1 4 0	05/09/78	Rockland et al.			
		4 6 2 8 9 3 7	12/16/86	Hess et al.,			
		4 7 8 7 3 8 9	11/29/88	Tarjan			
		5 1 7 4 2 8 9	12/29/92	Cohen			
		5 2 4 3 9 7 8	09/14/93	Duffin			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes	Translation No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

JPO	1	Page, E. Cardiac Gap Junctions. In: The Heart and Cardiovascular System. H.A. Fozzard, E. Haber, R.B. Jennings, A.M. Katz, and H.E. Morgan (eds). New York: Raven Press Ltd. 1992; 1003-1048. (Exhibit 2)
JPO	2	Spach MS, Miller WT III, Dolber PC, Kootsey JM, Sommer JR, Mosher CE Jr. The functional role of structural complexities in the propagation of depolarization in the atrium of the dog. Cardiac conduction distrubances due to discontinuities of effective axial resistivity. *Circ Res.* 1982; 50:175-191. (Exhibit 3)
JPO	3	Smith JH, Green CR, Peters NS, Rothery S, Severs NJ. Altered patterns of gap junctions distribution in ischemic heart disease. An immunohistochemical study of human myocardium using laser scanning confocal microscopy. *Am J Pathol.* 1991; 139:801-821. (Exhibit 4)

EXAMINER	DATE CONSIDERED
Frances P. Ospreay	4-25-03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this from with next communication to applicant.

APPL'T: Michael R. Rosen et al.
Serial: 09/505,458
Filed: February 11, 2000
FOR: CARDIAC REMODELING
Exhibit 1

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JPO	4	Luke RA, Saffitz JE. Remodeling of ventricular conduction pathways in healed canine infarct border zones. *J Clin Invest.* 1991;87:1594-1602. (Exhibit 5)
JPO	5	Peters NS, Green CR, Poole-Wilson PA, Severs NJ. Reduced content of connexin43 gap junctions in ventricular myocardium from hypertrophied and ischaemic human hearts. *Circulation.* 1993;88:864-875. (Exhibit 6)
JPO	6	Campos De Carvalho AC, Tanowitz HB, Wittner M. Dermietzel R, Roy C, Hertzberg EL, Spray DC. Gap junction distribution is altered between cardiac myocytes infected with Trypanosoma cruzi. *Circ Res.* 1992;70:733-742. (Exhibit 7)
JPO	7	Bastide B, Neyses L, Ganten D, Paul M, Willecke K, Traub O. Gap junction protein connexin40 is preferentially expressed in vascular endothelium and conductive bundles of rat myocardium and is increased under hypertensive conditions. *Circ Res.* 1993;73:1138-1149. (Exhibit 8)
JPO	8	Fast VG, Darrow BJ, Saffitz JE, Kleber AG. Anisotropic activation spread in heart cell monolayers assessed by high-resolution optical mapping. Role of tissue discontinuities. *Circ Res.* 1996;79:115-127. (Exhibit 9)
JPO	9	Guerrero-P-A; Schuessler-R-B; Davis-L-M; Beyer-E-C; Johnson-C-M; Yamada-K-A; Saffits-J-E: Slow ventricular conduction in mice heterozygous for a connexin43 null mutation. Journal of Clinical Investigation 1997;99(8): 1991-1998 (Exhibit 10)
JPO	10	Peters NS, Severs NJ, Coromilas J, Wit AL. Disturbed connexin43 gap junctional distribution correlates with the location of reentrant circuits in the epicardial border zone of healing canine infarcts that cause ventricular tachycardia. *Circulation.* 1997 95;988-996 (Exhibit 11)
JPO	11	Wijffels MCEF, Kirchhof CJHJ, Dorland R, Allessie MA: Atrial fibrillation begets atrial fibrillation. Circulation 1995;92: 1954-1968. (Exhibit 12)
JPO	12	Kajstura-J; Zhang-X; Liu-Y; Szoke-E; Cheng-W; Olivetti-G; Hintze-T-H; Anversa-P: The cellular basis of pacing-induced dilated cardiomyopathy: Myocyte cell loss and myocyte cellular reactive hypertrophy. Circulation 1995; 92(8): 2306-2317 (Exhibit 13)

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JPO	13	Rosenbaum MB, Blanco HH, Elizari MV, Lazzari JO, Davidenko JM: Electronic modulation of the T wave and cardia memory. Am J Cartel 1982;50:2130222. (Exhibit 14)
JPO	14	Chatteree K, Harris A, Davies G, Leatham A: Electrocardiographic changes subsequent to artificial ventricular depolarization. Br Heart J 1969;31:770-779 (Exhibit 15)
JPO	15	Shvilkin A, Danilo P, Jr. Wang J, Burkhoff D, Anyukhovsky EP, Sosunov EA, Hara M. Rosen MR. The evolution and resolution of long-term cardiac memory. Circulation 1998;97:1810-1817. (Exhibit 16)
JPO	16	del Balzo U, Rosen MR: T wave changes persisting after ventricular pacing in canine heart are altered by 4-aminopyridine but not by lidocaine. Circulation 1992;85: 1464-1472. (Exhibit 17)
	17	~~Katz AM: T wave ``Memory'': Possible causal relationship to stress~~-induced changes in cardiac ion channels? J Cardiovasc Electrophysiol 1992;3:150-159.
JPO	18	Tan, RC; Joyner, RW: Electronic influences on action potentials from isolated ventricular cells. Circ Res: 1990:67: 1071-1081) (Exhibit 18)
JPO	19	Yu H, McKinnon D, Dixon JE, Gao J, Wymore R, Cohen IS, Danilo, P Jr., Shvilkin A, Anyukhovsky EP, Sosunov EA, Hara M, Rosen MR: The transient outward current, I_{to1}, is altered in cardiac memory. Circulation, 1999; 99:1898-1905. (Exhibit 19)
JPO	20	Anyukhovsky EP, Sosunov EA, Feinmark SJ, et al: Effects of quinidine on repolarization in canine epicardium, midmyocardium, and endocardium: II. In vivo study. Circulation 1997;96:4019-4026. (Exhibit 20)
JPO	21	Anyukhovsky EP, Sosunov EA, Gainullin RZ, Rosen MR. The controversial M cell J Cardiovasc Electrophysiol, *in press*. (Exhibit 21)
JPO	22	Yeh-H-I; Dupont-E; Coppen-S; Rothery-S; Severs-N-J: Gap junction localization and connexin expression in cytochemically identified endothelial cells of arterial tissue. Journal of Histochemistry and Cytochemistry 1997; 45(4): 539-550 (Exhibit 22)
JPO	23	Hoyt RH, Cohen ML, Saffitz JE. Distribution and three-dimensional structure of intercellular junctions in canine myocardium. Circ. Res. 1989;64:563-574. (Exhibit 23)

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JPO	24	Peters NS, Wit AL. Myocardial architecture and ventricular arrhythmogenesis. Circulation 1998;97: 1746-1754. (Exhibit 24)
JPO	25	Spach MS, Dolber PC. The relation between discontinuous propagation in anisotropic cardiac muscle and the "vulnerable period" of reentry. In: Cardiac Electrophysiology and Arrhythmias D.P. Zipes and J. Jalife (eds). Grune and Stratton, Orlando. 1985;241-252. (Exhibit 25)
JPO	26	Wit AL, Janse MJ: Basic mechanisms of arrhythmias, in *The Ventricular Arrhythmias of Ischemia and Infarction*. New York, Futura, 1992, pp. 1-160. (Exhibit 26)
JPO	27	Lesh MD, Pring M, Spear JF: Cellular uncoupling can unmask dispersion of action potential duration in ventricular myocardium. Circ. Res. 1989;65:1426-1440. (Exhibit 27)
JPO	28	Elvan A. Wylie K, Zipes DP: Pacing-induced chronic atrial fibrillation impairs sinus node function in dogs. Electrophysiological remodeling. Circulation 1996;94:2953-60. (Exhibit 28)
JPO	29	Yue-L; Feng-J; Gaspo-R; Li-G-R; Wang-Z; Nattel-S: Ionic remodeling underlying action potential changes in a canine model of atrial fibrillation. Circulation Research 1997;81(4): 512-525. (Exhibit 29)
JPO	30	Quan W, Rudy Y: unidirectional block and reentry of cardiac excitation: a model study. Circ. Res. 1990;66:367-382. (Exhibit 30)
JPO	31	Van-Der-Velden-Huub-M-W; Van-Kempen-Marjan-J-A; Wijffels-Maurits-C-E-F; Van-Zijverden-Maaike; Groenewegen-W-Antoinette; Allessie-Maurits-A; Jongsma-Habo-J: Altered pattern of connexin40 distribution in persistent atrial fibrillation in the goat. Journal-of-Cardiovascular-Electrophysiology. June, 1998;9(6)595-607. (Exhibit 31)
ABSTRACT ONLY JPO	32	Patel P, Jones DG, Hadjinicolou L, Glenville B, Stanbridge R, Severs NJ, Peters NS. Changes in human atrial connexin expression in atrial fibrillation and ischemic heart disease. Circulation 1997;96(8):I-17. (Exhibit 32)

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